



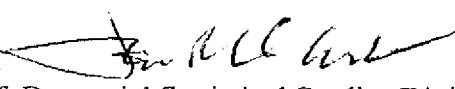
UNITED STATES DEPARTMENT OF COMMERCE
Bureau of the Census
Washington, DC 20233-0001

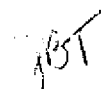
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MASTER FILE

DSSD CENSUS 2000 PROCEDURES AND OPERATIONS MEMORANDUM SERIES L-10

MEMORANDUM FOR Preston Jay Waite
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Subject: Census 2000 Response and Return Rates - National and State by
 Form Type

I. INTRODUCTION

In response to recent requests for their availability, this memorandum provides a listing of the mail response and return rates as of April 18, 2000 and the final response and return rates as of December 31, 2000 from the 2000 Decennial Census. Documented below is a brief description of the definitions and calculation of these rates and the data sources for the rates. The attachment includes the four sets of response and return rates at the national and state levels. A more detailed analysis will be performed later this year.

II. BACKGROUND

A. Response Rate Definition

Mail response rate is a measure of the Nonresponse Followup (NRFU) workload. It refers to the number of housing units with corresponding non-blank questionnaires checked in by the late cut for NRFU over the number of housing units that were in the mailback universe. The calculation of these rates is restricted to housing units that are in one of the mailback Type of Enumeration Areas (TEAs) - Mailout/Mailback (TEA 1), Update/Leave (TEA 2), Military (TEA 6), Urban Update/Leave (TEA 7), or Mailout/Mailback converted to Update/Leave (TEA 9).

To be included in the response rate denominator, an address must be a housing unit, in a mailback TEA, and not pre-identified as undeliverable. Additionally,

any address included in the denominator must have been eligible to be visited during NRFU.

In order to be included in the response rate numerator, an address must be in the denominator and have a non-blank mail return data capture. Those non-blank questionnaires include actual mail return questionnaires, Be Counted Forms (BCF), Internet returns, and responses via Telephone Questionnaire Assistance (TQA) or Coverage Edit Followup (CEFU). The existence of a data capture is determined from the Decennial Response File Stage 2 (DRF-2).

The mail response rate numerator includes cases that meet the above criteria and have a mail return check-in date of April 18, 2000 (the cut for the NRFU universe) or earlier. The *final* mail response rate numerator includes mail returns that came in through the end of the year (December 31, 2000). Some confirmed mail returns do not have a check-in date associated with them. These cases were included in the mail response rate numerator if they had neither a NRFU or Coverage Improvement Followup (CIFU) data capture. Those mail return data captures in the denominator with either a NRFU or CIFU data capture and with no check-in date were included in the final mail response rate numerator but not the mail response rate numerator.

B. Return Rate Definition

Mail return rate is a measure of respondent cooperation in mailback areas. It refers to the number of occupied housing units with corresponding non-blank questionnaires checked in by the late cut for NRFU over the number of occupied housing units. The calculation of these rates is restricted to housing units that are in one of the mailback TEAs - Mailout/Mailback (TEA 1), Update/Leave (TEA 2), Military (TEA 6), Urban Update/Leave (TEA 7), or Mailout/Mailback converted to Update/Leave (TEA 9).

To be included in the return rate denominator, an address must be an occupied housing unit, in a mailback TEA, and not a Census Undeliverable As Addressed (UAA) questionnaire. A Census UAA is a questionnaire in the Mailout/Mailback universe that was never successfully delivered to an address, either by the U.S. Postal Service or by Census Bureau employees. Deleted addresses in update/leave and urban update/leave also were excluded from the mail return rate denominator. Additionally, any address included in the denominator must have been added to the Decennial Master Address File (DMAF) through an operation that occurred prior to NRFU. The March 2001 Master Address File (MAF) extract was used to determine whether an address was added in one of those pre-NRFU operations.

In order to be included in the return rate numerator, an address must be in the denominator and have a non-blank mail return data capture. Those non-blank questionnaires include actual mail return questionnaires, BCFs, Internet returns, and responses via TQA or CEFU. The existence of a data capture is determined using information from the DRF-2.

The mail return rate numerator includes cases that meet the above criteria and have a mail return check-in date of April 18, 2000 (the cut for the NRFU universe) or earlier. The *final* mail return rate numerator includes mail returns that came in through the end of the year (December 31, 2000). Some confirmed mail returns do not have a check-in date associated with them. For these cases, they were included in the mail return rate numerator if they had neither a NRFU or CEFU data capture. Those mail return data captures in the denominator with either a NRFU or CEFU data capture and with no check-in date were included in the final mail return rate numerator but not the mail return rate numerator.

III. DATA SOURCE

The main source of data for calculating the response rates is the DMAF. For information on the layout and contents of the DMAF, see the DMAF documentation. The data capture variables from the DRF-2 also were used in the response rate calculations.

The source of data for calculating the return rates is the Hundred percent Census Edited File with the reinstated housing unit IDs (HCEF_D') created by the Decennial Systems and Contract Management Office. For information on the layout and contents of the HCEF_D', see the HCEF documentation (Philipp 2000). The data capture variables from the DRF-2 were used to determine whether a valid mail return had been received for an address. Variables from the March 2001 MAF extract were used to determine which addresses had been added to the DMAF by an operation prior to NRFU.

IV. PRESENTATION OF 2000 RESPONSE AND RETURN RATES

Table 1 contains the mail response rates, final response rates, mail return rates, and final return rates for the entire nation and for the fifty states, the District of Columbia and Puerto Rico. Note that the national rates do not include Puerto Rico. Total rates are presented as well as rates by form type (short form versus long form).

Table 1: Census 2000 Response and Return Rates by Form Type

State	Form Type	Response Rate as of		Return Rate as of	
		04/18/2000	12/31/2000	04/18/2000	12/31/2000
National	Total	64.3%	67.4%	74.1%	78.4%
	Short form	66.4%	69.1%	76.4%	80.1%
	Long form	53.9%	59.4%	63.0%	70.5%
Alabama	Total	58.5%	61.3%	69.8%	74.8%
	Short form	60.5%	62.9%	72.2%	76.6%
	Long form	49.0%	53.9%	58.3%	65.9%
Alaska	Total	53.3%	57.2%	68.2%	74.9%
	Short form	55.8%	59.1%	71.5%	77.2%
	Long form	42.6%	49.2%	54.5%	65.5%
Arizona	Total	60.8%	63.6%	71.7%	76.2%
	Short form	62.8%	65.2%	74.0%	78.0%
	Long form	49.5%	54.7%	58.5%	66.1%
Arkansas	Total	61.6%	64.5%	72.0%	77.6%
	Short form	63.9%	66.3%	74.7%	79.7%
	Long form	52.9%	57.5%	61.7%	70.0%
California	Total	66.8%	70.3%	74.2%	78.2%
	Short form	68.9%	71.9%	76.4%	79.9%
	Long form	54.4%	60.8%	60.9%	68.2%
Colorado	Total	67.3%	70.3%	75.5%	80.0%
	Short form	69.5%	71.9%	77.7%	81.4%
	Long form	56.4%	62.2%	64.4%	72.6%
Connecticut	Total	66.7%	70.0%	75.9%	79.8%
	Short form	68.9%	71.7%	78.4%	81.5%
	Long form	54.3%	61.0%	62.0%	69.9%
Delaware	Total	60.1%	63.4%	72.5%	77.1%
	Short form	62.6%	65.6%	74.8%	78.9%
	Long form	47.5%	53.0%	60.4%	68.1%
District of Columbia	Total	56.5%	60.4%	67.4%	71.9%
	Short form	58.9%	62.2%	70.1%	74.0%
	Long form	43.4%	50.3%	52.2%	60.4%
Florida	Total	60.7%	63.6%	72.9%	76.9%
	Short form	62.6%	65.1%	75.0%	78.5%
	Long form	49.2%	54.4%	59.7%	66.4%

State	Form Type	Response Rate as of		Return Rate as of	
		04/18/2000	12/31/2000	04/18/2000	12/31/2000
Georgia	Total	62.3%	65.1%	72.8%	77.4%
	Short form	64.2%	66.7%	75.0%	79.2%
	Long form	51.7%	56.3%	60.8%	67.7%
Hawaii	Total	56.8%	60.0%	69.3%	73.7%
	Short form	59.0%	61.7%	71.7%	75.5%
	Long form	46.0%	51.6%	57.0%	64.8%
Idaho	Total	64.0%	67.4%	77.5%	82.0%
	Short form	66.9%	69.6%	80.4%	84.0%
	Long form	51.6%	57.8%	65.0%	73.6%
Illinois	Total	66.1%	69.7%	75.0%	79.2%
	Short form	68.1%	71.1%	77.2%	80.6%
	Long form	56.2%	62.7%	64.3%	72.0%
Indiana	Total	66.1%	69.6%	76.8%	80.9%
	Short form	68.9%	71.6%	80.0%	83.1%
	Long form	52.4%	60.0%	61.0%	70.1%
Iowa	Total	72.6%	75.6%	81.3%	85.4%
	Short form	74.7%	76.9%	83.5%	86.7%
	Long form	65.4%	71.0%	73.5%	80.9%
Kansas	Total	67.4%	70.5%	77.2%	81.5%
	Short form	69.7%	72.2%	79.7%	83.1%
	Long form	58.0%	63.9%	67.0%	75.1%
Kentucky	Total	63.3%	66.3%	72.7%	77.9%
	Short form	65.2%	67.7%	75.1%	79.6%
	Long form	54.2%	59.8%	61.7%	70.0%
Louisiana	Total	57.6%	60.7%	68.9%	73.9%
	Short form	59.7%	62.4%	71.5%	75.8%
	Long form	47.2%	52.6%	56.7%	64.6%
Maine	Total	58.4%	61.2%	72.8%	78.1%
	Short form	61.4%	63.6%	75.7%	80.2%
	Long form	48.2%	52.7%	62.4%	70.5%
Maryland	Total	65.7%	69.0%	74.8%	78.8%
	Short form	67.7%	70.5%	77.1%	80.5%
	Long form	54.2%	60.4%	62.2%	69.5%
Massachusetts	Total	66.5%	69.5%	75.1%	78.5%
	Short form	68.5%	71.1%	77.2%	80.1%
	Long form	54.7%	60.3%	62.6%	69.0%

State	Form Type	Response Rate as of		Return Rate as of	
		04/18/2000	12/31/2000	04/18/2000	12/31/2000
Michigan	Total	68.2%	71.0%	79.8%	83.3%
	Short form	71.2%	73.4%	82.2%	84.9%
	Long form	56.7%	61.4%	70.2%	76.6%
Minnesota	Total	71.1%	75.1%	80.7%	85.8%
	Short form	74.5%	77.6%	83.4%	87.3%
	Long form	60.6%	67.2%	71.8%	80.8%
Mississippi	Total	59.9%	63.1%	70.6%	76.2%
	Short form	61.6%	64.5%	72.9%	78.0%
	Long form	51.9%	56.4%	60.5%	67.8%
Missouri	Total	66.6%	69.4%	77.2%	81.7%
	Short form	68.7%	71.0%	79.6%	83.3%
	Long form	57.8%	62.8%	67.4%	75.1%
Montana	Total	65.3%	68.4%	75.6%	82.4%
	Short form	68.4%	70.9%	78.2%	84.0%
	Long form	55.8%	60.9%	66.9%	77.4%
Nebraska	Total	71.9%	75.1%	80.7%	84.8%
	Short form	74.2%	76.5%	83.0%	85.9%
	Long form	64.3%	70.3%	73.1%	81.2%
Nevada	Total	63.1%	65.9%	70.0%	74.3%
	Short form	64.9%	67.3%	72.1%	75.9%
	Long form	51.5%	56.8%	56.7%	63.6%
New Hampshire	Total	64.4%	67.5%	74.5%	79.6%
	Short form	66.8%	69.5%	76.9%	81.3%
	Long form	53.4%	58.5%	63.8%	72.0%
New Jersey	Total	65.2%	68.4%	74.3%	77.9%
	Short form	67.3%	70.1%	76.4%	79.5%
	Long form	53.7%	59.2%	62.2%	68.7%
New Mexico	Total	58.9%	62.1%	70.0%	75.9%
	Short form	61.1%	63.9%	72.2%	77.6%
	Long form	47.8%	53.1%	58.2%	67.2%
New York	Total	60.4%	63.2%	70.2%	73.8%
	Short form	62.5%	65.0%	72.3%	75.5%
	Long form	50.1%	54.5%	59.7%	65.4%
North Carolina	Total	60.3%	63.7%	70.5%	76.4%
	Short form	62.3%	65.3%	72.7%	78.1%
	Long form	50.6%	56.0%	59.8%	68.2%

State	Form Type	Response Rate as of		Return Rate as of	
		04/18/2000	12/31/2000	04/18/2000	12/31/2000
North Dakota	Total	68.9%	71.6%	80.5%	85.1%
	Short form	71.8%	73.8%	83.3%	86.8%
	Long form	60.9%	65.5%	72.6%	80.5%
Ohio	Total	69.2%	71.9%	78.5%	81.6%
	Short form	71.1%	73.3%	80.5%	83.1%
	Long form	59.9%	64.8%	68.5%	74.3%
Oklahoma	Total	61.3%	64.6%	71.5%	76.7%
	Short form	64.0%	66.6%	74.4%	78.7%
	Long form	52.2%	57.5%	61.5%	69.8%
Oregon	Total	64.3%	67.6%	76.4%	80.4%
	Short form	66.4%	69.2%	78.6%	81.9%
	Long form	53.1%	59.6%	64.5%	72.5%
Pennsylvania	Total	67.4%	70.3%	78.2%	81.9%
	Short form	69.6%	72.0%	80.5%	83.5%
	Long form	57.9%	62.9%	68.2%	74.7%
Rhode Island	Total	64.3%	67.3%	72.4%	76.0%
	Short form	66.1%	68.8%	74.3%	77.5%
	Long form	53.7%	59.0%	61.1%	67.4%
South Carolina	Total	55.9%	59.1%	68.7%	74.3%
	Short form	57.9%	60.8%	71.3%	76.3%
	Long form	45.6%	50.8%	56.3%	64.3%
South Dakota	Total	71.0%	74.2%	81.1%	86.6%
	Short form	73.6%	75.8%	83.7%	87.8%
	Long form	63.2%	69.6%	73.3%	83.0%
Tennessee	Total	62.3%	65.3%	71.2%	76.0%
	Short form	64.2%	66.7%	73.4%	77.6%
	Long form	52.0%	57.9%	59.2%	67.4%
Texas	Total	60.9%	64.2%	69.5%	74.4%
	Short form	63.1%	65.9%	72.0%	76.2%
	Long form	49.9%	55.4%	57.4%	65.3%
Utah	Total	64.8%	68.3%	74.0%	79.0%
	Short form	67.1%	69.9%	76.5%	80.6%
	Long form	53.6%	60.5%	61.6%	71.5%
Vermont	Total	57.6%	60.8%	71.4%	78.7%
	Short form	61.1%	63.6%	74.6%	80.8%
	Long form	48.2%	53.1%	62.5%	72.7%

State	Form Type	Response Rate as of		Return Rate as of	
		04/18/2000	12/31/2000	04/18/2000	12/31/2000
Virginia	Total	68.4%	71.8%	75.6%	80.4%
	Short form	70.3%	73.1%	77.6%	81.9%
	Long form	57.8%	64.1%	63.8%	72.0%
Washington	Total	62.8%	66.4%	73.6%	77.9%
	Short form	65.0%	68.1%	76.1%	79.6%
	Long form	50.7%	57.6%	60.2%	68.7%
West Virginia	Total	61.8%	64.4%	73.1%	78.5%
	Short form	63.6%	65.8%	75.2%	80.1%
	Long form	54.4%	58.5%	64.4%	71.5%
Wisconsin	Total	71.2%	74.8%	82.5%	86.7%
	Short form	74.7%	77.4%	85.1%	88.2%
	Long form	60.5%	66.7%	73.9%	81.8%
Wyoming	Total	62.8%	65.9%	77.5%	82.6%
	Short form	65.1%	67.5%	79.9%	84.1%
	Long form	53.5%	59.0%	67.4%	76.2%
Puerto Rico	Total	48.4%	52.6%	55.0%	63.9%
	Short form	50.5%	54.5%	57.2%	65.9%
	Long form	37.6%	43.3%	43.7%	53.8%

Source: HCEF_D", DRF-2, and March 2001 MAF Extract.

V. REFERENCES

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